[] PHONE CALL [] DISCUSSION [] FIELD TRIP [] CONFERENCE RECORD OF [X] OTHER (SPECIFY) Comments COMMUNICATION (Record of item checked above) TO: FROM: Jennifer Snow-Ashbrook DATE TIME

SUBJECT Comments on Paperboard Specialties, Inc. Site Investigation Report

SUMMARY OF COMMUNICATION

I have reviewed the Site Investigation Report prepared by NJDEP for the Paperboard Specialties Site (CERCLIS # NJD147427843), located in Paterson, New Jersey, and have the following comments:

This site scores, and is recommended for further action, based on an observed release of contaminants to groundwater. There appears to be sufficient documentation to score the site based on the data presented; however, there are some issues related to the site scoring and the report text which need to be addressed before the report can be approved. The site scoring issues are discussed below.

Site Scoring Issues:

1. This site scores based on an observed release of site-associated contaminants to groundwater. However, much of the groundwater contamination associated with site apparears to have resulted from leaking underground fuel-oil and/or gasoline storage tanks. In order to avoid problems with the CERCLA "Petroleum Exclusion", fuel-related contaminants should be removed from consideration in scoring the site.

In addition, there may be a problem with attributing the inorganics detected in groundwater to site activities. The HRS Guidance states that: "The minimum requirements for establishing and observed release by chemical analysis are analytical data demonstrating the presence of a hazardous substance in the medium significantly above background level, and information that some portion of that increase is attributable to the site." While inorganic contaminants were detected in groundwater at concentrations greater than 3 times the concentrations observed in the background well, there does not appear to be any documented history of the use of inorganics in site processes. Additionally page 35 of the report text indicates that some metals "may be migrating from the adjacent industrial area." For these reasons, the inorganics should probably also be dropped from consideration in scoring the observed release.

The score-sheets (PREScore score-sheet pages 34 - 36) indicate that the contaminants used to document the observed release to groundwater include various inorganics, BTEX compounds, PAHs, and chlorinated organics (chlorobenzene, 1,1-dichloroethane, tetrachloroethylene). As discussed above, in order to avoid petroleum exclusion issues, the BTEX compounds and PAHs should not be considered in determining an observed release at this site. Since attribution may be a problem or the inorganics, they should also be excluded from consideration as "observed release" contaminants.

There does, however, appear to be some evidence that solvents were used in site activities. Previous workers at the facility alleged that waste solvents may have been disposed of into one or more of the underground storage tanks at the site to be burned in the facility's boiler. In addition, some of these compounds were

COMMENTS CONTINUED ON ATTACHED PAGES

CONCLUSIONS, ACTION TAKEN OR REQUIRED

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detected in subsurface soils in the vicinity of one or more of the USTs. Since the chlorinated organics (chlorobenzene, dichloroethane, and tetrachloroethylene) appear to meet the minimum requirements under the HRS for establishing an observed release, it would be appropriate to consider them in scoring the observed release to groundwater. Therefore, it is possible to score an "observed release" to groundwater without considering the fuel-related contaminants (i.e., BTEX compounds, PAHs, etc.) or inorganics detected in groundwater. Using this approach will result in a site score somewhat lower than the current score of 50; however, the site score will still be above the 28.5 point "cut-off" for recommending further action, and the resulting score will be much more solid and defensible.

- 2. There appears to be an error in the Hazardous Waste Quantity factor value used in scoring the site. The scoresheets (page 4 of the PREScore package) indicate that a source volume of 20,000 gallons (the volume of the largest UST) was used in determining the Hazardous Waste Quantity score. To determine the waste quantity factor value for a source volume of this type, the number of gallons is divided by a factor of 500. It appears that instead of dividing by the 500 (the factor used to determine waste quantity based on volume in *gallons*), a division factor of 2.5 (the factor used to determine waste quantity for volume in *cubic yards*) was used. When the correct division factor is used, the resulting Hazardous Waste Quantity factor value is 10 instead of 100. For clarification, please refer to Section 2.4.2.1.3 of the Hazard Ranking System Final Rule.
- 3. Scoring the site using an Observed Release based on chlorobenzene, 1,1-dichloroethane, and tetrachloroethylene, and the corrected Hazardous Waste Quantity factor (as describe above) results in the following changes to the site score:
 - The Toxicity/Mobility factor for groundwater should be 1.00 E+02 (instead of 1.00E+04);
 - The Hazardous Waste Quantity factor should be 10 (instead of 100);
 - These changes result in a **Waste Characteristics** score of 6 (instead of 32), a **Groundwater Pathway** score of 65.6, and a **Site Score** of 32.8.

Text Issues:

Generally, it should be kept in mind that this report is "pulic record", and is available for review by the general public at their request. There are some claims made in the text of the report which are not supported by the documentation provided. These claims should be removed or softened to avoid confusion on the part of anyone who might wish to review this report. There are several places in the report text where the author of the report states that the data indicate an "observed release" of site-associated contaminants, when that claim is not necessarily supported by the data. It should be noted that the HRS requires very strong documentation in order to confirm as an observed release, including evidence that the contaminants in question are attributable to the site, and that valid background samples were collected to show that contaminants are present at concentrations significantly above background. Specific concerns associated with the report text are described below.

1. Beginning on page 7, the report discusses the collection of boiler ash for dioxin analysis. Page 9 indicates that dioxin was detected in boiler ash "confirming allegations that waste solvents and transformer oil had been added to one or all of the fuel oil tanks in the past." The detection of dioxins in boiler ash does not confirm that transformer oil and solvents specifically were burned in the boiler. There are many other materials which could have been burned in the boiler to produce dioxins in the boiler ash. The statement that the presence of dioxin in ash "confirms" that these materials were burned in the boiler could be confusing to the general public, who may have access to this document. Please modify this statement, something like "The presence of dioxin in boiler ash might be explained by the burning of transformer oil or solvent waste, as alleged by former Paper Board Specialties employees" would be appropriate.

- 2. Similarly, Pages 9 10 describe the collection of one sample from a feed pipe connecting one of the USTs and the boiler. PCB Aroclor 1260 was detected in this sample. The report states that "The sample confirmed that waste solvents and transformer oil had been added to one or all of these fuel oil tanks in the past." While the presence of PCBs in the feed pipe suggests that PCBs may have been present in one UST, it does not "confirm" their presence in any other UST, nor does it in any way "confirm" the presence of solvents in this, or any other UST.
- 3. The final paragraph on page 24 and the first paragraph on page 25 appear to be the same as the first two paragraphs paragraphs on page 20. This appears to be a typographical error, since these two sections discuss different sampling events. Please remove the repeated paragraphs from whichever section is appropriate.
- 4. Page 25 In the first paragraph, it is stated that PCBs were detected in sample P1-CS2A at 0.220 ppm (220 ppb) and that "PCBs ar attributable to site operations and constitute an observed release to soil." Please note that in HRS terminology, the term "observed release" is not generally applied to soils. It would be appropriate to note that the detection of PCBs in sub-surface soils lends further support to the allegation that transformer oils may have been added to USTs at the facility, and that their presence in soils suggests that one or more of these USTs may have leaked. In addition, subsurface soils contaminated with PCBs could be used as a "source" for scoring a "potential release" to groundwater.
- 5. Also on page 25 The third paragraph states that petroleum hydrocarbons were detected "significantly above background", and that they constitute an "observed release". As discussed above (under "Scoring Issues"), please note that TPHC should not be considered in scoring the site, and the HRS language of "observed release" should not be applied to these contaminantss. However, it would be appropriate to note that the presence of petroleum hydrocarbons in sub-surface soils does indicate that some or all of the site's USTs may have leaked some of thier contents to surrounding soils.
- 6. Also on page 25 The fourth paragraph states that "ash samples from inside and around boilers revealed the presence of dioxins... These contaminants constitute an observed release which is attributed to site operations." While the presence of dioxins in the ash sample may suggest that materials other than fuel oil were burned in the boiler, it does not constitute or document a release of any substance to any HRS medium of concern (groundwater, surface water, soil or air).
- 7. On page 35, in the first paragraph it is stated that barium was detected in groundwater at **2,74 ppb**. I believe this is a typographical error, which should read **2,740**, **ppb**.
- 8. The first paragraph on page 35 also states that "volatile and semivolatile organic compounds, pesticides, other metals and cyanide were detected at concentrations above background and constitute an observed release to groundwater." It would be useful to indicate which well was considered "background" for this sampling event in order to make it easier for the reviewer, or the general public, to get some idea of exactly how elevated above background the contaminants detected in groundwater are.

If you have any questions concerning these comments, please contact Jennifer Snow-Ashbrook at (732) 321-4454. When the concerns detailed above are addressed, this report can be approved. Please submit the corrected Narrative section of the report and corrected score sheets directly to the EPA Region 2 Edison field office at the following address:

2890 Woodbridge Avenue Building 10 Edison, NJ 08837



U.S. Environmental Protection Agency **Region II** 2890 Woodbridge Avenue Edison, NJ 08837-3679

FACSIMILE TRANSMISSION

To:

Ken Kloo and John Usmiani, NJDEP

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Pages:

4, including this cover sheet

From:

Jennifer Snow-Ashbrook

Phone #: (732) 321-4454

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(732) 321-6616

Subject: Comments on Paperboard Specialties SIP

COMMENTS:

Ken/John,

Attached are my questions/comments regarding the Paperboard Specialties SI. If you have any questions regarding these comments, please feel free to call me at (732) 321-4454, or contact me by e-mail at snow.jennifer@epamail.epa.gov.

Thanks, Jennifer